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CABINET AFFAIRS STAFFING MEMORANDUM

DATE: 9-14-82 NUMBER: 077468CA DUE BY: _____

SUBJECT: Cabinet Council on Commerce and Trade - September 15, 1982

8:45 a.m. - Roosevelt Room

	ACTION	FYI
ALL CABINET MEMBERS	☐	☐
Vice President	☑	☐
State	☑	☐
Treasury	☑	☐
Defense	☑	☐
Attorney General	☑	☐
Interior	☐	☑
Agriculture	☑	☐
Commerce	☑	☐
Labor	☑	☐
HHS	☐	☑
HUD	☐	☑
Transportation	☑	☐
Energy	☑	☐
Education	☐	☑
Counsellor	☑	☐
OMB	☐	☑
CIA	☐	☑
UN	☐	☐
USTR	☐	☐
CEA	☑	☐
CEQ	☐	☐
OSTP	☐	☐
_____	☐	☐
_____	☐	☐

	ACTION	FYI
Baker	☑	☐
Deaver	☐	☐
Clark	☑	☐
Darman *(For WH Staffing)*	☑	☐
Harper	☑	☐
Jenkins	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐
CCCT/Gunn	☑	☐
CCEA/Porter	☐	☐
CCFA/Boggs	☐	☐
CCHR/Carleson	☐	☐
CCLP/Uhlmann	☐	☐
CCNRE/Boggs	☐	☐

REMARKS: The CCCT will meet Wednesday, September 15, at 8:45 a.m. in the Roosevelt Room. Attached are the agenda and papers on the U.S. Nuclear Industry. The Steel Trade Issues paper is forthcoming.

CONFIDENTIAL

Not referred to DOC. Waiver

RETURN TO:

☐ **Craig L. Fuller**
Assistant to the President
for Cabinet Affairs
456-2823

☑ **Becky Norton Dunlop**
Director, Office of
Cabinet Affairs
456-2800

THE WHITE HOUSE

WASHINGTON

THE CABINET COUNCIL ON COMMERCE AND TRADE

September 15, 1982

8:45 a.m.

Roosevelt Room

AGENDA

1. Steel Trade Issues (CM#96)
2. U.S. Nuclear Industry (CM#182)

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

September 15, 1982

MEMORANDUM FOR MEMBERS OF THE CABINET COUNCIL ON COMMERCE AND TRADE

FROM: WENDELL GUNN
Executive Secretary

SUBJECT: Agenda for Meeting of September 15, 1982
8:45 a.m., Roosevelt Room

Attached are the reading materials for this week's CCCT meeting. The items to be discussed are as follows:

1. Trade Issues: Steel (Brief update memo to be distributed prior to meeting.)

2. U.S. Nuclear Industry (This paper was distributed prior to the August 11 meeting, but now contains a minor change, which is underlined, on page 7.)

UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary for Economic Affairs
Washington, D.C. 20230

Unclassified Upon Removal of
Classified Attachment(s)

CONFIDENTIAL

MEMORANDUM FOR Cabinet Council on Commerce and Trade

FROM: Robert G. Dederick
Under Secretary for Economic Affairs-designate

SUBJECT: Final Report of the Nuclear Equipment Working Group

Attached is the final report of the interagency Working Group on Nuclear Equipment. This report represents a consensus of the views of the participating agencies.

Attachment

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Approved For Release 2007/08/04 : CIA-RDP84T00109R000100070008-6

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THE NUCLEAR EQUIPMENT WORKING GROUP

The Nuclear Equipment Working Group (NEWG) was asked to investigate the long-term prospects of the nuclear equipment industry, to analyze the implications for the economy, national defense, and foreign relations, and to suggest changes in U.S. policy if appropriate. Overall, we have concluded that the evidence offered to justify further Federal support of the nuclear industry is insufficient to warrant such actions. The group has reached the following conclusions:

- The ability of the industry to meet a potential resurgence of domestic demand for nuclear plants in the 1990's appears to be adequate and, thus, poses no long-term problems requiring Government intervention.

- DOD should continue to review the special requirements of its nuclear programs with a view toward assuring the availability of critical components.

- To meet nonproliferation objectives the U.S. should maintain a major role, and in certain cases possibly a dominant role, in the nuclear power programs of countries relying on foreign suppliers.

- To help the U.S. industry bid successfully in the international market, the U.S. government should continue its efforts to secure multilateral agreement on financing terms for nuclear plant and equipment. Until such agreement is reached, the financing needs for nuclear power plant exports should continue to be reviewed on a project by project basis and be supported by Eximbank financing within current budget restraints.

Though active support should be given to the Administration's legislative proposal on nuclear siting and licensing, recommendations for changes in domestic regulations and for dealing with other utility problems concerning nuclear generation should await completion of the Cabinet Council on Natural Resources and Environment study of the regulatory environment for the domestic electric utility sector.

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OUTLOOK

The economic outlook for the U.S. nuclear equipment industry is poor. There have been many plant cancellations in recent years, and there may be additional cancellations or deferrals of the remaining orders in process. There have been no net new orders for domestic nuclear power plants since August 1974, and none is likely before 1990. Also, over the past decade, the export market (accounting for roughly 20 percent of all nuclear related sales) has become increasingly competitive. It has become smaller as well, because of local "buy national" policies and slower growth of energy demand.

Over the remaining years of this decade, U.S. vendors of nuclear power plants and equipment should be operating in a market for between 14.1 and 33.8 gigawatts of nuclear power generating capacity worldwide. This means that U.S. firms could be active competitors for 8 to 21 new plants in the 1982 to 1990 period.[1] In view of the increasing world competition for orders, it is unlikely that U.S. firms would win more than 40 to 50 percent of the orders, the U.S. share in recent years. This translates into about 1 major nuclear power plant per year.

In short, even under the most optimistic conditions foreign orders for nuclear power plants are unlikely to absorb the significant excess manufacturing capacity of the industry. The four U.S. nuclear plant suppliers have the capacity to build more than 20 plants per year. For practical purposes, they will be confined almost entirely, however, to producing the plants already in process and to supplying parts, maintenance, and fuel services for plants already in service.

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[1] Plants are projected to be constructed in Mexico, South Korea, Taiwan, the Philippines, Egypt, the PRC, Finland, Yugoslavia, Portugal, Australia, and the United Kingdom. Major component sales could be to Spain, the United Kingdom, Belgium, Italy, and Japan.

ISSUES

The dim outlook for new nuclear plant orders throughout the remainder of this decade raises important questions about the industry's capacity to meet a potential increase in domestic orders after 1990, and the implications of substantially reduced domestic capacity for our national defense nonproliferation and goals.

Ability of U.S. Industry to Meet Future Demand

The industry should be able to meet a resurgence of demand for nuclear plants in the 1990's.

The four primary companies comprising the nuclear equipment industry are not dependent on their nuclear plant sales for survival. To be sure, the decline in nuclear plant orders has resulted in the shutdown of several heavy nuclear fabricating facilities and is likely to lead to other closings. These plants are being mothballed, though, or changed over to non-nuclear production. Therefore, they will be available to resume nuclear production if and when demand picks up. Moreover, at least two of the four producers in the industry have entered into or are completing cross licensing and joint development agreements with foreign suppliers, thus supporting the conclusion that U.S. firms intend to stay in the nuclear business despite the current slowdown in demand.

According to a recent survey commissioned by the Department of Energy of second and third tier nuclear suppliers, the current weak demand situation does not pose an insoluble problem for future production. These suppliers indicate that if demand for nuclear energy increases, they would consider re-entering the business, and if long-term prospects appear profitable, they would certainly re-enter.

Furthermore, in the past, most manufacturers of the key technical components of nuclear power plants purchased new factories and machine tools when future demand appeared to exceed their capacity to build equipment. This expansion was in place and available for production before the equipment to be manufactured was required. Nothing has happenened to indicate that this investment pattern will not persist. In fact, the 1981 changes in tax laws provide additional incentives to undertake this planned investment.

It is possible, however, that critical skills may be in short supply, particularly engineering skills. One result of the decline in nuclear power orders has been the fall of College enrollment in Nuclear Engineering majors.

In addition, as manufacturers and architect-engineers shift workloads from nuclear power plant construction to nuclear upgrades, repairs, and safety-related activities, a different mix of personnel skills, capital equipment, and physical plant is required. If there is a surge of new plant construction orders in the 1990's, those firms with the necessary critical skills might find themselves stretched thin, and the quality and timeliness of work efforts could suffer.

Nonetheless, it is by no means certain that this situation will seriously affect construction capabilities. Given the long lead time in site selection, design, project approvals and initial site preparation for nuclear projects, there would probably be a significant period available for training and upgrading critical skills if new orders materialize.

The Working Group has not been able to determine that the U.S. nuclear industry would cease to remain at the forefront of design capability. The two leading nuclear companies, GE and Westinghouse, have or expect to reach separate agreements with Japanese companies for joint design of an "Advanced Reactor System" (ARS), which will be at the leading edge of technology. Though it is expected that the Japanese will be the first to build an ARS, the agreements provide that critical portions of the new design be developed by the U.S. companies. The U.S. firms would also participate in the construction, startup, and initial operation of the ARS to insure that the important feedback from these activities is shared.

National Security Consideration (Confidential)

The Department of Defense examined the potential impact on national security programs of a total demise of the commercial nuclear industry. Their survey of the three major national security programs which could be affected by such a demise indicates that:

- For the Naval Nuclear Propulsion Program, there would be no anticipated problems at the prime contractor level in peacetime. There are possible, unspecified problems at the subcontractor and lower tier supplier levels, but the severity of the problem would depend on the level of demand for the products of these suppliers.

- For DOE's Nuclear Materials Production program, special nuclear materials for defense would continue to be produced, but at a somewhat higher cost, as in-house capabilities replace those no longer available from industry. Also, surge capability would be limited.

- For DOE's Division of Weapons Production, no immediate effects are expected. However, more study is needed to substantiate this conclusion.

No analysis that has been done, however, points to the complete demise of the industry. With the decline in domestic and foreign reactor orders, certain parts of the domestic commercial manufacturing base are contracting; and prices for some components and materials are expected to rise. However, many areas of the nuclear industry are growing (such as servicing, replacing pumps and valves, and fuel work) and will continue to grow as more reactors now under construction come on line.

Costs to the defense programs for the procurement of adequate technical personnel may rise in the long-term, if fewer people elect careers in a declining commercial industry. However, a decrease in commercial design and technology development efforts should have only a moderate impact. For example, the naval reactor program already has two national laboratories run by two of the large reactor vendors which are dedicated to working on advanced reactor design, development, and procurement for the Government. In addition, the technology of naval reactors is significantly different from that of commercial reactors.

The DOD survey does suggest that some unspecified problems for defense programs in procuring components from sub-tier suppliers could arise in the long term. Procurement of certain parts and materials may become more difficult or costly with the shrinkage of the commercial manufacturing base. However, analysis has found no widespread or significant problem, with many specific items being affected. The naval reactor program, for example, has several suppliers of instrumentation and control equipment and valves, most of which are dedicated to producing only for the naval program. A decline in commercial reactor manufacturing would not, therefore, affect them directly, unless a sub-tier supplier of parts or materials were to go out of business or raise prices, an event that requires further DOD study. The current decline in commercial reactor manufacturing, however, is not anticipated to have a major impact on national security programs in the next several years.

In view of these findings, the Working Group concludes that there is no immediate national security need for major Government intervention to arrest the shrinkage in the technology and manufacturing base of commercial reactors. Moreover, any foreseeable problems which may develop for national security programs resulting from the decline in the commercial reactor base can probably best be solved by defense and DOE programs targeted at the specific manufacturing bottlenecks as they are identified.

Nevertheless, DOD and DOE should continue their review of the impact on national security activities of the predicted decline in the commercial nuclear technology and manufacturing base. Should major problems be uncovered which cannot be solved within existing programs and legislation applicable to those departments, the two agencies should request consideration through the budget process.

Nonproliferation Considerations

President Reagan declared that to realize our nonproliferation objectives, it "is essential" to reestablish this nation as a "predictable and reliable partner for nuclear cooperation under adequate safeguards."

The Working Group believes that the U.S. position as a major supplier in international nuclear commerce provides the following nonproliferation benefits:

(a) Our position facilitates U.S. efforts to enhance international nuclear rules of trade and to gain support on an ad hoc basis from other suppliers for specific steps to thwart particular countries' attempts to acquire materials, components, or facilities for nuclear explosives programs. Because the U.S. is a major supplier -- with many supply ties to other countries -- other countries may be more willing to follow our lead than if we were not as active in the market. These efforts can contribute to the first line of defense against nuclear weapons proliferation.

(b) Nuclear cooperation with a country provides leverage for U.S. influence in urging caution if a country is under pressure to acquire nuclear explosives. The leverage of supply ties also has been used to induce countries to end troublesome activities.

(c) The activities and connections of U.S. vendors and technicians abroad provide a supplement to intelligence gathering by U.S. intelligence agencies. This helps to provide early warning needed for more effective anti-proliferation actions.

(d) Our current export role provides openings in day-to-day interaction with other countries for making global nuclear energy development safer. In particular, it facilitates U.S. efforts to ensure that the future use of plutonium as a fuel increases as little as possible the risk of nuclear theft or proliferation.

(e) Our current U.S. role also allows the U.S. to influence the conditions under which additional countries gain access to nuclear energy technology for peaceful purposes in the decade ahead. Through its supplier role for U.S. customers, the U.S. can require rigorous safeguards and other controls and can help define the rules and conditions governing possible access to sensitive technology by advanced developing countries.

The Departments of State and Energy believe it is critical for the implementation of U.S. nonproliferation policy that the U.S. continue as a dominant exporter of prime nuclear equipment and fuel and, in particular, that U.S. vendors be able to win reactor orders abroad, particularly in those countries where we now maintain a dominant influence, and in new markets where we need to have leverage to influence programs. According to State, it is not possible to retain a leadership role in the development of international rules of nuclear trade and in shaping the emerging international safeguards system of the International Atomic Energy Agency if we let ourselves become merely a supplier of components and fuel reloads.

Other agencies in the Working Group, including Commerce, OPD, CEA, OMB, and Treasury believe that the U.S. has other effective means through its global military strength and overall economic leverage to attain some of its nonproliferation objectives, even if its market share of future nuclear power plant were to continue to fall. They point out that the U.S. can maintain a strong voice in shaping international and multilateral rules of nuclear trade based on its position as a major supplier of existing reactors and on its continuing position in the marketplace as a supplier of fuel reloads and spare parts for existing reactors. They also argue that the U.S. need not be a major supplier in every sale in all countries to be able to play a strong leadership role in nonproliferation negotiations. Nonetheless, these agencies recognize a potential need for special actions, such as priority access to Eximbank financing, to win nuclear orders in specific countries, if nonproliferation goals cannot be gained through other means.

Export Financing

Most major industrial countries have public export credit programs to help finance capital goods exports. Without commenting on the desirability of providing subsidized export financing in the nuclear area, the Working Group notes that the importance of such financing as a factor in winning export orders will increase if: (1) the subsidy provided by foreign suppliers increases, (2) the importer's access to capital markets for long-term project financing becomes more limited, (3) the level of U.S. technology becomes relatively comparable to that available from other suppliers.

Foreign governments typically offer heavily subsidized financing packages for nuclear exports, and in many instances nuclear technology is relatively standardized. Consequently, nuclear power plant exports have been strongly influenced by officially supported export financing, with virtually all U.S. nuclear power plant exports since 1974 and also those of most of our competitors having been supported by official financing packages. Also, long maturities on official nuclear financing result in a higher interest subsidy per dollar of exports in this sector than in most others.

Given the high cost of nuclear export financing, the Working Group strongly supports continuation of current USG efforts to gain acceptance of rules to reduce subsidies for nuclear plant exports by all supplier countries. However, the Working Group concludes that domestic economic considerations specific to U.S. nuclear manufacturers would not warrant increasing the resources of the Export-Import Bank or giving nuclear export financing higher priority than that of other sectors in allocating the Banks current budgetary resources. High priority for providing nuclear export financing may be warranted, however, in some cases to meet U.S. nuclear nonproliferation objectives. The Working Group recommends that the financing needs for nuclear power plant exports continue to be reviewed on a project by project basis and be supported by Eximbank financing within current budget restraints.